Network structure and "agglomeration" Ryo Itoh *

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Abstract

This study investigates coordination of binary choices on given social networks with incomplete information on individual preference. Supposing an evenly distributed random variable in preference, this static network game provides us an analytically feasible unique equilibrium for general network structure that bias of choice to an advantageous alternative is specified by Bonacich's centrality measure of network, as well as the continuous behavior of Ballester et al.(2006, *Econometrica*). We also find that such behavioral agglomeration yields positive externalities via network, and hence the social optimal behavior, also specified by Bonacich's centrality measure, represents higher agglomeration than the equilibrium.

Key words: network structure, binary choice, incomplete information, bonacich centrality, behavioral agglomeration

JEL classification: D21,D85,R12.

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